



THE SCIENCE OF READYSM

SOUTH 4 GROUP FIRE

Port Neches, TX

Property Assessment Summary

December 9, 2019

Project #112322

1.0 Introduction

Beginning on December 1, 2019, CTEH® initiated observational assessments and collection of potential facility-related debris in the adjacent community near the TPC Group facility located in Port Neches, Texas. These observational assessments, debris collection, and sampling events have been driven by concerns over bulk debris potentially containing asbestos, which may have been dislodged or mechanically disturbed during the South 4 Group Fire and subsequently transported to off-site locations. The property assessments were conducted at various locations, including residential, commercial, and public areas, within the community surrounding the TPC Group facility.

This report summarizes the analytical sampling data from wipe and bulk samples collected during property assessments conducted from December 1st, 2019 to December 7th, 2019 and laboratory reports received as of December 9th, 2019.

2.0 Bulk and Wipe Sampling Methods

CTEH has developed and implemented a Community Assessment Plan for the South 4 Group Fire Response. The Community Assessment Plan was approved by local, state, and federal representatives of the on-site Unified Command (UC). **Attachment A** contains an incident site map and sampling locations map.

Following the field collection of potential facility-related debris, samples were sent to an American Industrial Hygiene Association (AIHA)-accredited laboratory for analysis. Bulk samples were analyzed for the asbestos content and fibers using the EPA 600/R-93/116 Method involving polarized light microscopy. In addition to bulk sample analysis, CTEH collected wipe samples to verify the presence/absence of asbestos fibers on both indoor and/or outdoor surfaces associated with residences that reported potential terminal debris on their property. Wipe samples were analyzed for the presence of asbestos fibers via ASTM Method 6480.

3.0 Analytical Sampling Results

A summary of bulk and wipe sample results is included in Tables 1 and 2, respectively. **Attachment B** and **Attachment C** include tables of bulk and wipe sample results, respectively, broken down by location.

Table 1. Property Assessment Bulk Sampling Summary
Data as of 12/9/2019 1500 CDT

Analytical Method	Analyte	# Laboratory Results	# Detections	Range of Detections (%)
EPA 600/R-93/116	Asbestos Type	100	43	2 – 55 %

Table 2. Property Assessment Wipe Sampling Summary
Data as of 12/9/2019 1500 CDT

Analytical Method	Analyte	# Laboratory Results	# Detections of Asbestos Type	Range of Detections (Asbestos Structures)
ASTM Method 6480	Asbestos Type	90	0	< 2.99 asbestos structures

Attachment A

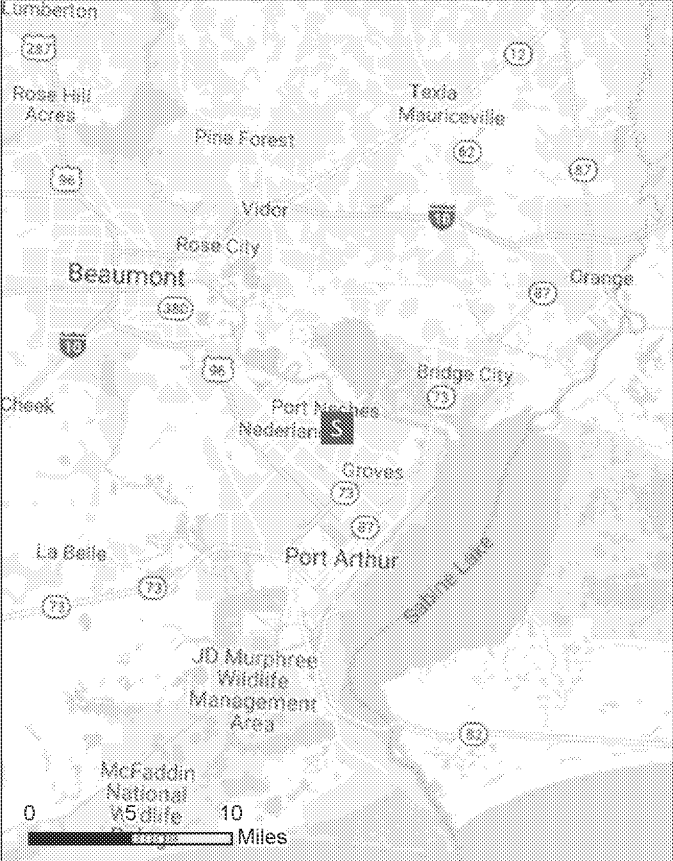
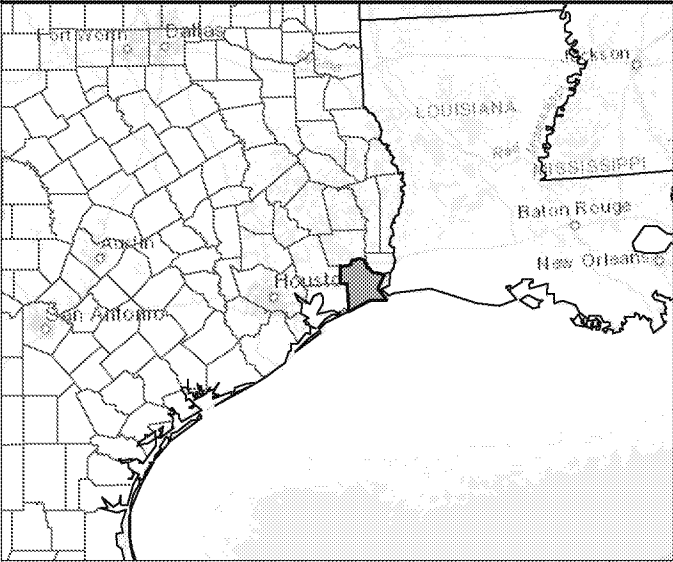
Site Location and Sampling Locations



Site Location
South 4 Group Fire | Port Neches, TX



Project: 112322
Client: TPC Group
City: Port Neches, TX
County: Jefferson



S Site Location



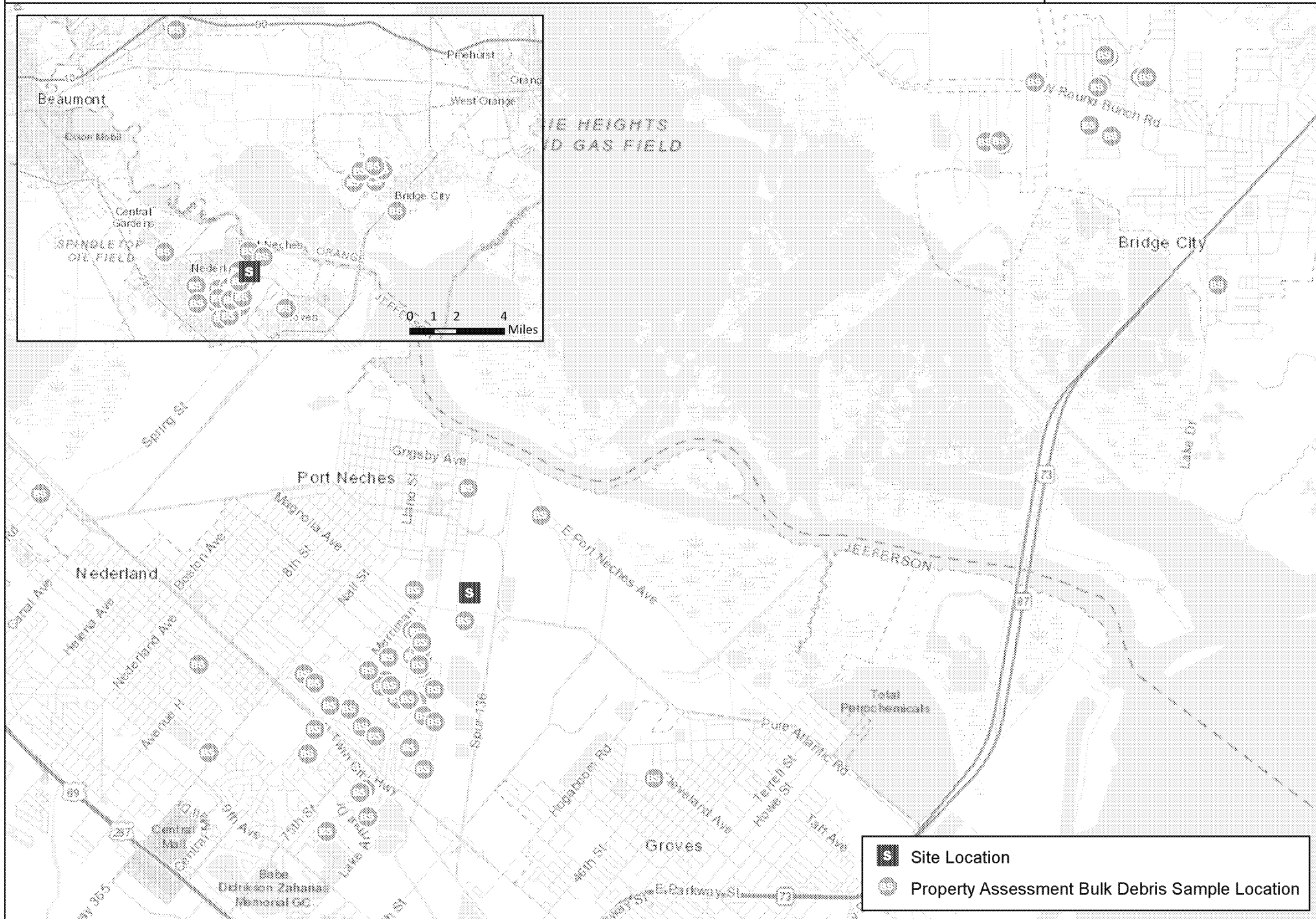
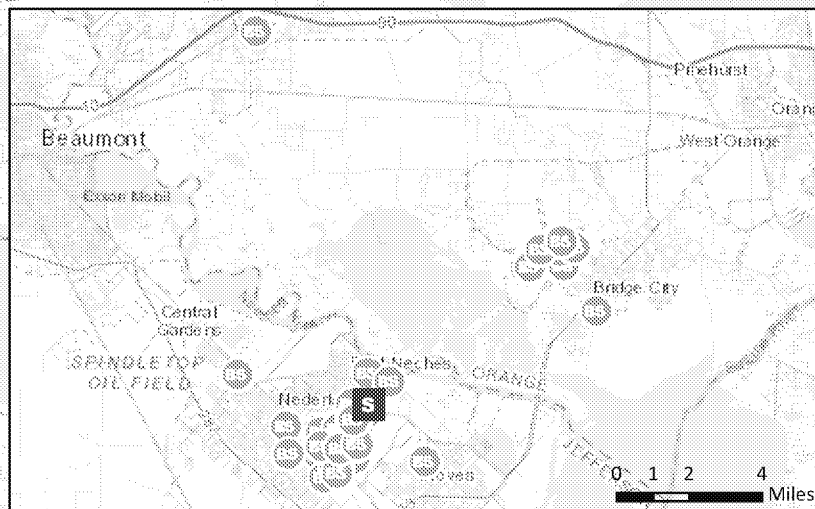
Preliminary Asbestos Bulk Debris Sampling Property Assessment Locations

South 4 Group Fire | Port Neches, TX | 12/01/2019 - 12/08/2019

0 0.5 1 2 Miles



Project:112322
Client: TPC
City: Port Neches, TX
County: Jefferson



COORDINATE SYSTEM: NAD 1983 UTM Zone 15N DATUM: North American 1983

LAST UPDATED: 12/9/2019 3:38:54 PM



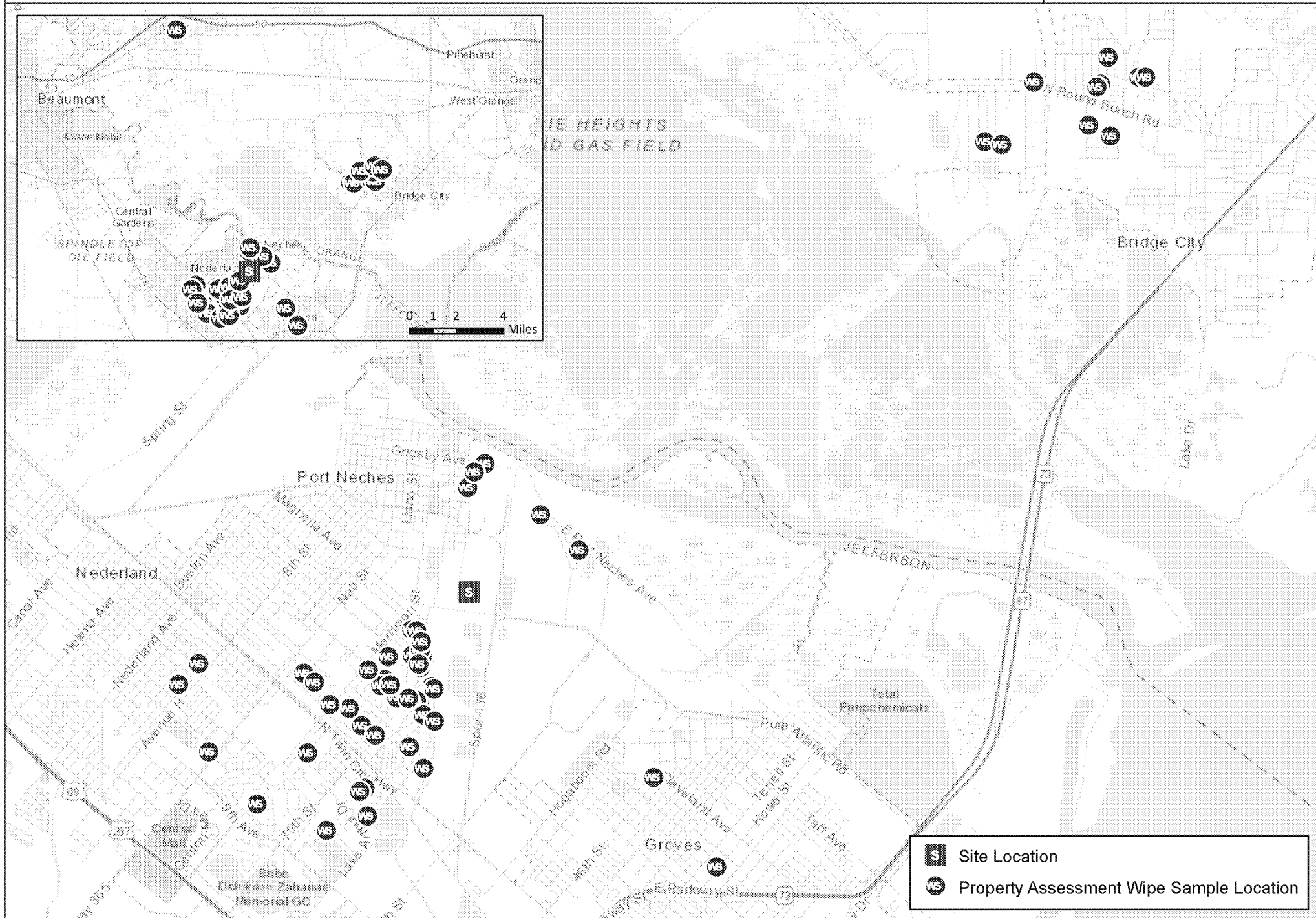
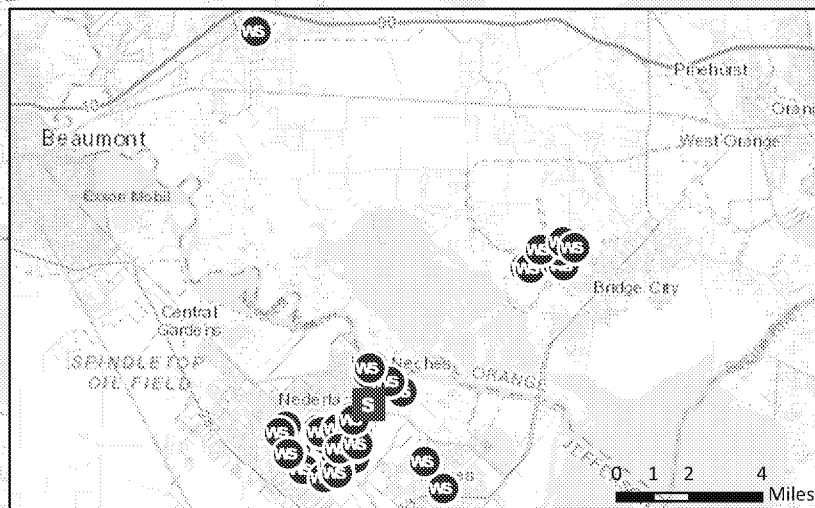
Preliminary Asbestos Wipe Sampling Property Assessment Locations

South 4 Group Fire | Port Neches, TX | 12/01/2019 - 12/08/2019

0 0.5 1 2 Miles



Project:112322
Client: TPC
City: Port Neches, TX
County: Jefferson



COORDINATE SYSTEM: NAD 1983 UTM Zone 15N DATUM: North American 1983

LAST UPDATED: 12/9/2019 3:38:45 PM

Attachment B

Bulk Sampling Results

Preliminary Asbestos Laboratory Results | Property Assessment Bulk Sampling (PLM)¹

South 4 Group Fire | Data as of 12/9/2019 4:50:10 PM

City/Facility	Sample Date	Sample Number	Lab COC	Color	Asbestos Type	Asbestos Type %	% Non-Fibrous Amount
Orange, TX	12/1/2019	OTX1201BS001	151908987	White/Black	Chrysotile	5	95
	12/1/2019	OTX1201BS002	151908987	Gray/White/Beige	None Detected	NA	5
			151908987	Black	Chrysotile	6	94
	12/1/2019	OTX1201BS003	151908987	Black	Chrysotile	7	93
	12/1/2019	OTX1201BS004	151908987	Black	Chrysotile	6	94
	12/1/2019	OTX1201BS005	151908987	Black	Chrysotile	5	95
Port Neches, TX	12/1/2019	OTX1201BS006	151908987	Gray/Yellow	None Detected	NA	5
			151908987	Black	Chrysotile	4	86
	12/2/2019	PNTX1202BS001B	151909004	Black	Chrysotile	4	96
			151909004	Black	None Detected	NA	100
	12/2/2019	PNTX1202BS001A	151909004	Black	Chrysotile	8	92
			151909004	Black	Chrysotile	5	95
			151909004	White/Black	None Detected	NA	85
			151909004	Black/Beige	None Detected	NA	5
	12/2/2019	PNTX1202BS003B	151909004	Black	Chrysotile	7	93
			151909004	Black	None Detected	NA	100
			151909004	Black	None Detected	NA	100
	12/2/2019	PNTX1202BS002B	151909004	Black	None Detected	NA	100
	12/2/2019	PNTX1202BS004B	151909004	Black	Chrysotile	5	95
			151909004	Black	None Detected	NA	100
	12/2/2019	PNTX1202BS005B	151909004	Black	Chrysotile	7	93
			151909004	Black	None Detected	NA	100
	12/2/2019	PNTX1202BS006B	151909004	Various/Black	None Detected	NA	75
			151909004	White	None Detected	NA	100
	12/2/2019	PNTX1202BS007B	151909004	Black	None Detected	NA	100
			151909004	Gray	Chrysotile	23	77
	12/2/2019	PNTX1202BS001C	151909004	Black	Chrysotile	4	96
	12/2/2019	PNTX1202BS002C	151909004	Black	Chrysotile	7	93
			151909004	White	None Detected	NA	100
			151909004	Gray/White/Black	Chrysotile	<1	100
	12/2/2019	PNTX1202BS002A	151909004	Black	None Detected	NA	100
			151909004	Black	Chrysotile	8	92
			151909004	Black	Chrysotile	8	92
	12/2/2019	PNTX1202BS003A	151909004	White/Beige	Chrysotile	20	80
	12/2/2019	PNTX1202BS003C	151909004	Various/Black/Silver	Chrysotile	8	82
	12/2/2019	PNTX1202BS004C	151909004	Black	Chrysotile	4	96
	12/2/2019	PNTX1202BS008B	151909004	White	None Detected	NA	100
			151909004	Gray/Black	Chrysotile	5	95
	12/2/2019	PNTX1202BS005C	151909004	Black	Chrysotile	5	95
			151909004	Black	Chrysotile	<1	100
			151909004	Gray/Blue	None Detected	NA	100
	12/3/2019	PNTX1203BS001A	151909085	Gray/White/Black	Chrysotile	2	83
	12/4/2019	PNTX1204BS002B	151909085	Black/Silver/Beige	Chrysotile	4	91
	12/4/2019	PNTX1204BS003B	151909085	Gray/Black/Silver	Chrysotile	4	96
			151909085	Black	None Detected	NA	100
			151909085	Black	None Detected	NA	40
	12/4/2019	PNTX1204BS004B	151909085	Gray/Black	Chrysotile	6	74
	12/4/2019	PNTX1204BS007C	151909084	Gray/Black/Silver	Chrysotile	4	96

Non-detections are reported as less than ("<") the laboratory reporting limit.

¹Asbestos analysis by bulk materials via EPA 600/R-93/116 method using Polarized Light Microscopy (PLM)

²Sample provided by resident's neighbor and was not collected directly by CTEH personnel

Preliminary Asbestos Laboratory Results | Property Assessment Bulk Sampling (PLM)¹

South 4 Group Fire | Data as of 12/9/2019 4:50:10 PM

City/Facility	Sample Date	Sample Number	Lab COC	Color	Asbestos Type	Asbestos Type %	% Non-Fibrous Amount
Port Neches, TX	12/4/2019	PNTX1204BS007C	151909084	Brown	None Detected	NA	100
	12/4/2019	PNTX1204BS008C	151909084	Gray/Black	Chrysotile	4	96
			151909084	Brown/Black	None Detected	NA	30
	12/4/2019	PNTX1204BS010C	151909084	Black	Chrysotile	4	96
	12/4/2019	PNTX1204BS009C	151909084	Black	Chrysotile	6	94
	12/4/2019	PNTX1204BS011C	151909084	Black	None Detected	NA	100
	12/4/2019	PNTX1204BS012C	151909084	Gray/Black	Chrysotile	4	76
	12/5/2019	PNTX1205BS006B	151909148	Gray/Black	None Detected	NA	100
			151909148	Gray/White	None Detected	NA	70
			151909148	White	None Detected	NA	5
	12/5/2019	PNTX1205BS002B	151909148	Brown/Black	None Detected	NA	100
			151909148	Brown/Silver	None Detected	NA	100
			151909148	Black	None Detected	NA	100
			151909148	Brown/Black	None Detected	NA	20
	12/5/2019	PNTX1205BS003B	151909148	Gray/Black/Silver	Chrysotile	6	74
	12/5/2019	PNTX1205BS005C	151909146	Brown/Black	Chrysotile	4	96
	12/5/2019	PNTX1205BS006C	151909146	Gray/Black	Chrysotile	7	93
	12/5/2019	PNTX1205BS007C	151909146	Black	None Detected	NA	100
			151909146	White	None Detected	NA	100
			151909146	Tan	None Detected	NA	20
			151909146	White	None Detected	NA	10
	12/5/2019	PNTX1205BS004B	151909148	Silver/Blue	None Detected	NA	100
			151909148	Gray/Beige	None Detected	NA	100
			151909148	Brown/Black	None Detected	NA	30
	12/5/2019	PNTX1205BS006B	151909148	Gray/Black	None Detected	NA	100
			151909148	Gray/White	None Detected	NA	70
			151909148	White	None Detected	NA	5
	12/5/2019	PNTX1205BS007B	151909148	Brown/Rust	None Detected	NA	100
Bridge City, TX	12/4/2019	PNTX1204BS001B	151909085	Gray/Black	Chrysotile	8	82
	12/4/2019	PNTX1204BS006B	151909085	Gray/Black/Silver	Chrysotile	6	84
	12/4/2019	PNTX1204BS007B	151909085	Brown/White/Black	Chrysotile	4	81
			151909085	White/Black	None Detected	NA	80
	12/5/2019	PNTX1205BS001C	151909146	Gray/Black/Silver	Chrysotile	5	75
	12/5/2019	PNTX1205BS002C	151909146	Black	Chrysotile	7	93
	12/5/2019	PNTX1205BS003C	151909146	Black	Chrysotile	4	36
	12/5/2019	PNTX1205BS004C	151909146	Black	Chrysotile	7	93
Port Arthur, TX	12/4/2019	PNTX1204BS002C	151909084	Black/Silver	None Detected	NA	100
	12/4/2019	PNTX1204BS001C	151909084	White/Black	None Detected	NA	20
			151909084	Black	Chrysotile	4	96
			151909084	Brown/Black	None Detected	NA	100
			151909084	Black	None Detected	NA	100
	12/4/2019	PNTX1204BS003C	151909084	White	None Detected	NA	10
	12/4/2019	PNTX1204BS006C	151909084	Black/Silver	None Detected	NA	100
	12/4/2019	PNTX1204BS005C ²	151909084	White	Chrysotile	55	45
	12/4/2019	PNTX1204BS004C	151909084	White	None Detected	NA	100
			151909084	Brown/Black/Silver	Chrysotile	4	96

Non-detections are reported as less than ("<") the laboratory reporting limit.

¹Asbestos analysis by bulk materials via EPA 600/R-93/116 method using Polarized Light Microscopy (PLM)

²Sample provided by resident's neighbor and was not collected directly by CTEH personnel

Preliminary Asbestos Laboratory Results | Property Assessment Bulk Sampling (PLM)¹

South 4 Group Fire | Data as of 12/9/2019 4:50:10 PM

City/Facility	Sample Date	Sample Number	Lab COC	Color	Asbestos Type	Asbestos Type %	% Non-Fibrous Amount
Port Arthur, TX	12/4/2019	PNTX1204BS005B	151909085		None Detected	NA	0
			151909148	Black/Silver	None Detected	NA	100
Nederland, TX	12/5/2019	PNTX1205BS001B	151909148	Black	None Detected	NA	20
			151909148	Blue	None Detected	NA	20
	12/5/2019	PNTX1205BS008B	151909148	Beige	None Detected	NA	5
			151909148	Black	None Detected	NA	100
			151909148	Blue	None Detected	NA	5
Huntsman Water Treatment Facility	12/2/2019	PNTX1202BS001D	151909004	Black	None Detected	NA	100
			151909004	Gray	None Detected	NA	20
			151909004	Silver/Blue	None Detected	NA	100
	12/2/2019	PNTX1202BS002D	151909004	Silver	None Detected	NA	100
			151909004	Black	None Detected	NA	100

Non-detections are reported as less than ("<") the laboratory reporting limit

¹Asbestos analysis by bulk materials via EPA 600/R-93/116 method using Polarized Light Microscopy (PLM)

²Sample provided by resident's neighbor and was not collected directly by CTEH personnel

Attachment C

Wipe Sampling Results

Preliminary Asbestos Laboratory Results | Exterior/Interior Property Assessment Wipe Sampling¹ South 4 Group Fire | Data as of 12/9/2019 3:39:34 PM

City	Sample Date	Sample ID	Lab COC	Area Sampled (cm²)	Asbestos Structures
Orange, TX	12/01/2019	PNTX1201WS002	151908991	100	< 2.99
		PNTX1201WS003	151908991	100	< 2.99
	12/03/2019	PNTX1203WS009C	321925789	100	< 2.99
		PNTX1203WS010C-1	321925789	100	< 2.99
		PNTX1203WS010C-2	321925789	100	< 2.99
		PNTX1203WS011-1	321925789	100	< 2.99
		PNTX1203WS011-2	321925789	100	< 2.99
		PNTX1203WS012-1	321925789	100	< 2.99
		PNTX1203WS012-2	321925789	100	< 2.99
Port Neches, TX	12/01/2019	PNTX1201WS001	151908991	100	< 2.99
	12/02/2019	PNTX1202WS001A	291912755	100	< 2.99
		PNTX1202WS001B	291912755	100	< 2.99
		PNTX1202WS001C	321925661	100	< 2.99
		PNTX1202WS002B	291912755	100	< 2.99
		PNTX1202WS002C	321925661	100	< 2.99
		PNTX1202WS003A	291912755	100	< 2.99
		PNTX1202WS003B	291912755	100	< 2.99
		PNTX1202WS003C	321925661	100	< 2.99
		PNTX1202WS004A	291912755	100	< 2.99
		PNTX1202WS005A	291912755	100	< 2.99
		PNTX1202WS006A	291912755	100	< 2.99
		PNTX1202WS008A	291912755	100	< 2.99
	12/03/2019	PNTX1203WS001A	161924763	100	< 2.99
		PNTX1203WS001C	021908176	100	< 2.99
		PNTX1203WS002A	161924763	100	< 2.99
		PNTX1203WS002B	191914730	100	< 2.99
		PNTX1203WS002C	021908176	100	< 2.99
		PNTX1203WS003	161924763	100	< 2.99
		PNTX1203WS003C	021908176	100	< 2.99
		PNTX1203WS004A	161924763	100	< 2.99
		PNTX1203WS004C	021908176	100	< 2.99
		PNTX1203WS005A	161924763	100	< 2.99
		PNTX1203WS005C	021908176	100	< 2.99
		PNTX1203WS006A	161924763	100	< 2.99
		PNTX1203WS006C	021908176	100	< 2.99
		PNTX1203WS007A	161924763	100	< 2.99
		PNTX1203WS007B	191914730	100	< 2.99
		PNTX1203WS007C	021908176	100	< 2.99
		PNTX1203WS008A	161924763	100	< 2.99

Non-detections are reported as less than ("<") the laboratory reporting limit.

¹Asbestos analysis of dust samples via ASTM 6380 method using Transmission Electron Microscopy (TEM)

Preliminary Asbestos Laboratory Results | Exterior/Interior Property Assessment Wipe Sampling¹ South 4 Group Fire | Data as of 12/9/2019 3:39:34 PM

City	Sample Date	Sample ID	Lab COC	Area Sampled (cm²)	Asbestos Structures
Port Neches, TX	12/03/2019	PNTX1203WS008B	191914730	100	< 2.99
		PNTX1203WS008C	021908176	100	< 2.99
		PNTX1203WS009A	161924763	100	< 2.99
		PNTX1203WS009B	191914730	100	< 2.99
		PNTX1203WS010A	021908176	100	< 2.99
		PNTX1203WS010B	191914730	100	< 2.99
		PNTX1203WS011A	021908176	100	< 2.99
		PNTX1203WS012A	321925789	100	< 2.99
		PNTX1203WS013A	321925789	100	< 2.99
		PNTX1203WS014A	321925789	100	< 2.99
	12/04/2019	PNTX1204WS001A	411911779	100	< 2.99
		PNTX1204WS002A	411911779	100	< 2.99
		PNTX1204WS003A	411911779	100	< 2.99
		PNTX1204WS003B	291912866	100	< 2.99
		PNTX1204WS003C-1	081903476	100	< 2.99
		PNTX1204WS003C-2	081903476	100	< 2.99
		PNTX1204WS004A	411911779	100	< 2.99
		PNTX1204WS004B	291912866	100	< 2.99
		PNTX1204WS004C-1	161924958	100	< 2.99
		PNTX1204WS004C-2	161924958	100	< 2.99
		PNTX1204WS005A	411911779	100	< 2.99
		PNTX1204WS005B	291912866	100	< 2.99
Port Arthur, TX	12/02/2019	PNTX1202WS007A	291912755	100	< 2.99
	12/03/2019	PNTX1203WS001B	191914730	100	< 2.99
		PNTX1203WS003B	191914730	100	< 2.99

Non-detections are reported as less than ("<") the laboratory reporting limit.

¹Asbestos analysis of dust samples via ASTM 6380 method using Transmission Electron Microscopy (TEM)

Preliminary Asbestos Laboratory Results | Exterior/Interior Property Assessment Wipe Sampling¹ South 4 Group Fire | Data as of 12/9/2019 3:39:34 PM

City	Sample Date	Sample ID	Lab COC	Area Sampled (cm²)	Asbestos Structures
Port Arthur, TX	12/03/2019	PNTX1203WS004B	191914730	100	< 2.99
		PNTX1203WS005B	191914730	100	< 2.99
		PNTX1203WS006B	191914730	100	< 2.99
	12/04/2019	PNTX1204WS001C-1	081903476	100	< 2.99
		PNTX1204WS001C-2	081903476	100	< 2.99
		PNTX1204WS002C-1	161924958	100	< 2.99
		PNTX1204WS002C-2	161924958	100	< 2.99
		PNTX1204WS008B	291912866	100	< 2.99
Bridge City, TX	12/04/2019	PNTX1204WS001B	291912866	100	< 2.99
		PNTX1204WS002B	291912866	100	< 2.99
		PNTX1204WS009B	291912866	100	< 2.99
		PNTX1204WS010B	291912866	100	< 2.99

Non-detections are reported as less than ("<") the laboratory reporting limit.

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